DOCUMENT RESUME

ED 453 262 TM 032 799

AUTHOR Panitz, Theodore; Panitz, Patricia
TITLE Assessing Students and Yourself Using the One Minute Paper and Observing Students Working Cooperatively.
PUB DATE 1999-12-00
NOTE 11p.
PUB TYPE Reports - Descriptive (141)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Classroom Observation Techniques; *Cooperative Learning; *Informal Assessment; Learning Strategies; Secondary Education; Self Evaluation (Individuals); *Student Evaluation; *Teaching Methods

ABSTRACT

This paper describes two approaches to the evaluation of student learning skills and learning styles: the "One Minute Paper" and classroom observation of students in cooperative learning groups. The One Minute Paper developed, by R. Weaver and H. Cottrell (1985), is a form completed by students at the end of class that asks students to indicate the most significant thing they learned that day and whether they have remaining questions. Completing this exercise encourages students to reflect and review, and it gives teachers immediate feedback on student understanding and problems. The One Minute Paper can be varied by asking students to work in pairs or groups and review each other's answers. Cooperative learning activities provide teachers with opportunities to observe students interacting. One way to approach classroom observation is to look for a hierarchy of abilities similar to Bloom's taxonomy. In this way, the stage of development and learning style of each student can be determined. By the time a test is taken, the instructor knows who will perform well and who will not. (SLD)

Reproductions supplied by EDRS are the best that can be made
from the original document.

ED 453 262

Assessing Students and Yourself Using the One Minute Paper and Observing Students Working Cooperatively

Theodore Panitz and Patricia Panitz

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

- This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

T. Panitz

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

1

TM 032 799

BEST COPY AVAILABLE

ASSESSING STUDENTS AND YOURSELF USING THE ONE MINUTE PAPER AND OBSERVING STUDENTS WORKING COOPERATIVELY

by Dr. Theodore Panitz and Patricia Panitz

Standardized tests using multiple choice, true false, fill in the blanks or essay questions provide a limited basis for understanding and evaluating student performance. These methods deal primarily with factual information, rote memory and perhaps some critical thinking through an essay. What is needed in addition to these historic assessment techniques are methods for understanding students' affective learning skills and a variety of student learning styles. The "One Minute Paper", developed by Weaver and Cottrell(1), modified by Wilson(2), and observation of students in cooperative groups provide two excellent additions to our repertoire of assessment techniques.

The one minute paper is completed by the students at the end of class (and actually takes several minutes). Two questions are asked: 1. What is the most significant thing you learned today? (This question can be generalized as 'What did you learn today' or made case specific by asking 'What did you learn about _____ today?'); 2. What question(s) do you still have? (This question may be left general or directed to a particular part of the class or concept). The papers may be anonymous or signed. I recommend anonymous papers initially. This encourages students to participate more openly and provides general information for the teacher. Students will give more direct and honest answers if they feel they will not be judged or penalized by expressing their opinions and feelings. When

students become familiar with this form of self assessment and learn to trust the teacher's response you can ask for signed papers. The primary advantage of a signed paper is that the teacher can respond directly and privately to individual students. A transition might involve making signatures voluntary for those students who wish a specific response.

The purpose of this exercise is to encourage students to reflect on the class and review and synthesize what they learned before they leave the class. Most classes end when the teacher has finished lecturing. It is an abrupt end causing students to focus on their next class or activity, virtually blocking out the material they have just covered. The next time they look at the material occurs when they start their homework.

Use of the one minute paper provides a number of benefits to the students:

1. They summarize and synthesize the concepts covered by describing them in their own words.

2. They review and focus on the most important ideas covered.

3. They practice writing across the curriculum.

4. The are asked to articulate what they do not understand. This helps them identify areas for further study and review.

5. Using a nonverbal approach, they can communicate their concerns, identify problems, ask for specific help, explain what is working for them and make suggestions for improving the class process.

The benefits to the teachers are:

1. They can determine if students have understood the concepts covered in class.

2. They can identify problems individuals are having and whether they are widespread or individualized.

3. A line of communication is opened between the teacher and students.

4. Student responses can provide ideas for improving instruction or call attention to a need for a review of material.

5. Responding to students in writing and verbally personalizes the process of teaching.

6. Teachers get to know their students much better. They get to know their students' personalities, problems, accomplishments as well as any extenuating circumstances behind student performance.

7. This technique can be used in large classes to obtain quick feedback in a short period with limited effort well before using an exam.

What should you expect when starting this technique? Initially students write short, cryptic answers. Some will hide their discomfort with being asked to assess themselves through humor by asking questions like "When is lunch?" or "Can we end the class early?". Since this technique is not used in many classes, the students will be unfamiliar with its purpose and usefulness. They need time to get the "hang" of thinking about the class and writing about it. As you respond positively, either on an individual basis or to the class as a whole, the students will gain confidence in the process. They will begin to see it as a formative process which is intended to help them and the teacher and which is not critical or judgmental. Students are amazed to see a teacher discuss a problem with them which they have raised through the one minute paper, about class procedure or content, and then make changes to address those problems. Students begin to write more, ask for personal responses and become very introspective about their performance in the class and to give constructive suggestions about the class. This gives the teacher an opportunity to encourage students who may be having difficulties and praise those who are doing their best. Students will also do the same for the teacher. Even we need encouragement sometimes.

There are a few variations to the one minute paper. Cross and Angelo (3) suggest students work in pairs and exchange their papers in order to compare and discuss their responses. They might try to answer each others questions. This idea can be extended to groups of 3

or 4. Students individually or in groups could suggest questions and then analyse the collective responses and present the results to the class. Groups could discuss problem areas identified by the above analysis and suggest solutions which might include changes in class procedures, student participation or other classroom issues. There are few opportunities for this type of feedback in conventional classes where the class ends when the teacher ends their lecture.

Cooperative learning activities present teachers with unique opportunities to observe students interacting, explaining their theories, arguing for a particular point of view, helping their peers and being helped. Only a few minutes of observation during a class period can provide significant insights into a student's ability and performance level.

In using observations I look for a hierarchy of abilities similar to Bloom's taxonomy.

1. Do they know the basics- definitions, formulas, vocabulary, rules, and procedures needed to analyze and solve problems?

2. Can they apply their knowledge to similar problems or questions?

3. Are they able to extend their reasoning and analysis to new situations or problems?

4. Can they create their own problem statements or questions based upon the underlying concepts being studied?

5. Can they explain their reasoning in writing or verbally to their peers?

By asking each of these questions I can identify the stage of development the student has reached and make recommendations as to what material and procedures the student might apply to help him/her understand the concepts better.

There are many benefits to observing students at work in groups with their peers.

1. You can observe a student working through a complete problem or assignment versus seeing only the final product (exam or paper).

2. You can observe their reasoning techniques, level of basic knowledge, and concept attainment.

3. You can identify their dominant learning style by observing whether their presentation in pairs or groups is oral, visual or kinesthetic. This information can be invaluable if you help tutor the student in or out of class. (As an aside, cooperative learning lends itself to using multiple learning style presentations throughout each class).

4. Brief, specific interventions are possible by the teacher or other students to provide help and/or guidance for students having difficulties. I try to make these in the form of guiding questions versus statements of fact or direction. This is very effective but can

lead to frustration on the students' part until they get used to a questioning response from the teacher instead of a mini-lecture.

5. Informal conversations take place between individuals, groups and the teacher which help highlight problem areas the entire class may be having. These discussions also help create class environment which is more personal, as students get to know the teacher and the teacher learns about the students.

6. Shy students will participate more with their peers in small groups than in a large class and they too can be observed. It is very helpful to identify students who are shy in order to encourage their participation in non-threatening ways.

By the time a test is given I know exactly which students will perform well and which will not. I often suggest that students postpone taking an exam if I have observed that they are not ready. I use a mastery testing method which allows for this approach. This requires an extra effort on my part to have multiple tests available. I find that the positive effect of encouraging students to take tests when they are truely ready far outweighs potential problems. The one caveat here is that the students must keep up with the course if they want to finish in one semester. Their options are to repeat the course or take an incomplete and finish during the next semester if they do not finish on time. On occasion I have passed students on exams who have such high test anxiety that they cannot function under exam conditions but work perfectly well outside of the pressure of the exam. By relying on observations I can have the student demonstrate in their groups how

to answer test questions or I can invite them to my office to have them show me their solutions one on one instead of in a public setting. I can have them make oral presentations in class or out of class, in their groups or on the board before the whole class at their discretion. This has the effect of relaxing students when they see they are not going to fail since they have several alternative ways of being assessed. Invariably their self esteem builds to the point where they can overcome their test anxiety. They have demonstrated to themselves as much as to the teacher that they can understand the concepts and demonstrate their competence.

The benefits of using observations as an assessment tool to help students understand when they have mastered course material are numerous. This approach reduces anxiety markedly, raises students' self esteem, puts them in control of their own destiny and emphasizes that they are responsible for their own learning The results they obtain are based upon their efforts, not the teacher's.

In our continuing attempts to find assessment tools that actually reflect on students' actual learning, the one minute paper and observation of students working in groups provide steps toward this goal. Both methods allow for evaluation in a manner that goes beyond merely tallying "correct answers" to attempts to understand how students reason, analyse and arrive at conclusions. The allowance for, and encouragement of differing student learning styles and modalities are among the many benefits.

References:

1. Weaver, R.L., & Cotrell, H.W. (1985Fall/Winter). Mental aerobics: The half-sheet response. Innovative Higher Education, 10, 23-31

2. Wilson, R.C. (1986 March/April). Improving faculty teaching: Effective use of the student evaluations and consultatnts. Journal of Higher Education 57(2), 196-211

3. K. Patricia Cross, & Thomas Angelo, Classroom Assessment Techniques- A handbook for Faculty 1988,. prepared for the National Center for Teaching To Improve Postsecondary Teaching and Learning